

Exploring Aeronautics			
1998 Science			
Content Standards			
California Science			
Grade 5			
Activity/Lesson	State	Standards	
The Activity Center	CA	SCI.5.IE.6.i	Scientific progress is made by asking meaningful questions and conducting careful investigations. As a basis for understanding this concept and addressing the content in the other three strands, students should develop their own questions and perform investigations. Students will Write a report of an investigation that includes conducting tests, collecting data or examining evidence, and drawing conclusions
Science of Flight	CA	SCI.5.IE.6.c	Scientific progress is made by asking meaningful questions and conducting careful investigations. As a basis for understanding this concept and addressing the content in the other three strands, students should develop their own questions and perform investigations. Students will Plan and conduct a simple investigation based on a student-developed question and write instructions others can follow to carry out the procedure
Science of Flight	CA	SCI.5.IE.6.e	Scientific progress is made by asking meaningful questions and conducting careful investigations. As a basis for understanding this concept and addressing the content in the other three strands, students should develop their own questions and perform investigations. Students will Identify a single independent variable in a scientific investigation and explain how this variable can be used to collect information to answer a question about the results of the experiment
Science of Flight	CA	SCI.5.IE.6.g	Scientific progress is made by asking meaningful questions and conducting careful investigations. As a basis for understanding this concept and addressing the content in the other three strands, students should develop their own questions and perform investigations. Students will Record data by using appropriate graphic representations (including charts, graphs, and labeled diagrams) and make inferences based on those data

Scientific Method(124-144)	CA	SCI.5.IE.6.e	Scientific progress is made by asking meaningful questions and conducting careful investigations. As a basis for understanding this concept and addressing the content in the other three strands, students should develop their own questions and perform investigations. Students will Identify a single independent variable in a scientific investigation and explain how this variable can be used to collect information to answer a question about the results of the experiment
Scientific Method(124-144)	CA	SCI.5.IE.6.g	Scientific progress is made by asking meaningful questions and conducting careful investigations. As a basis for understanding this concept and addressing the content in the other three strands, students should develop their own questions and perform investigations. Students will Record data by using appropriate graphic representations (including charts, graphs, and labeled diagrams) and make inferences based on those data
Scientific Method(124-144)	CA	SCI.5.IE.6.h	Scientific progress is made by asking meaningful questions and conducting careful investigations. As a basis for understanding this concept and addressing the content in the other three strands, students should develop their own questions and perform investigations. Students will Draw conclusions from scientific evidence and indicate whether further information is needed to support a specific conclusion
Exploring Aeronautics			
1998 Science			
Content Standards			
California Science			
Grade 6			
Activity/Lesson	State	Standards	
Tools of Aeronautics(257-326)	CA	SCI.6.ESIE.7.b	Scientific progress is made by asking meaningful questions and conducting careful investigations. As a basis for understanding this concept and addressing the content in the other three strands, students should develop their own questions and perform investigations. Students will Select and use appropriate tools and technology (including calculators, computers, balances, spring scales, microscopes, and binoculars) to perform tests, collect data, and display data

The Tools of Aeronautics	CA	SCI.6.ESIE.7.b	Scientific progress is made by asking meaningful questions and conducting careful investigations. As a basis for understanding this concept and addressing the content in the other three strands, students should develop their own questions and perform investigations. Students will Select and use appropriate tools and technology (including calculators, computers, balances, spring scales, microscopes, and binoculars) to perform tests, collect data, and display data
The Activity Center	CA	SCI.6.ESIE.7.b	Scientific progress is made by asking meaningful questions and conducting careful investigations. As a basis for understanding this concept and addressing the content in the other three strands, students should develop their own questions and perform investigations. Students will Select and use appropriate tools and technology (including calculators, computers, balances, spring scales, microscopes, and binoculars) to perform tests, collect data, and display data
Science of Flight	CA	SCI.6.ESIE.7.a	Scientific progress is made by asking meaningful questions and conducting careful investigations. As a basis for understanding this concept and addressing the content in the other three strands, students should develop their own questions and perform investigations. Students will Develop a hypothesis
Science of Flight	CA	SCI.6.ESIE.7.b	Scientific progress is made by asking meaningful questions and conducting careful investigations. As a basis for understanding this concept and addressing the content in the other three strands, students should develop their own questions and perform investigations. Students will Select and use appropriate tools and technology (including calculators, computers, balances, spring scales, microscopes, and binoculars) to perform tests, collect data, and display data
Scientific Method(124-144)	CA	SCI.6.ESIE.7.a	Scientific progress is made by asking meaningful questions and conducting careful investigations. As a basis for understanding this concept and addressing the content in the other three strands, students should develop their own questions and perform investigations. Students will Develop a hypothesis

Scientific Method(124-144)	CA	SCI.6.ESIE.7.b	Scientific progress is made by asking meaningful questions and conducting careful investigations. As a basis for understanding this concept and addressing the content in the other three strands, students should develop their own questions and perform investigations. Students will Select and use appropriate tools and technology (including calculators, computers, balances, spring scales, microscopes, and binoculars) to perform tests, collect data, and display data
Exploring Aeronautics			
1998 Science			
Content Standards			
California Science			
Grade 7			
Activity/Lesson	State	Standards	
Tools of Aeronautics(257-326)	CA	SCI.7.LSIE.7.a	Scientific progress is made by asking meaningful questions and conducting careful investigations. As a basis for understanding this concept and addressing the content in the other three strands, students should develop their own questions and perform investigations. Students will Select and use appropriate tools and technology (including calculators, computers, balances, spring scales, microscopes, and binoculars) to perform tests, collect data, and display data
The Tools of Aeronautics	CA	SCI.7.LSIE.7.a	Scientific progress is made by asking meaningful questions and conducting careful investigations. As a basis for understanding this concept and addressing the content in the other three strands, students should develop their own questions and perform investigations. Students will Select and use appropriate tools and technology (including calculators, computers, balances, spring scales, microscopes, and binoculars) to perform tests, collect data, and display data
The Tools of Aeronautics	CA	SCI.7.LSIE.7.d	Scientific progress is made by asking meaningful questions and conducting careful investigations. As a basis for understanding this concept and addressing the content in the other three strands, students should develop their own questions and perform investigations. Students will Construct scale models, maps, and appropriately labeled diagrams to communicate scientific knowledge (e.g., motion of Earth's plates and cell structure)

The Activity Center	CA	SCI.7.LSIE.7.a	Scientific progress is made by asking meaningful questions and conducting careful investigations. As a basis for understanding this concept and addressing the content in the other three strands, students should develop their own questions and perform investigations. Students will Select and use appropriate tools and technology (including calculators, computers, balances, spring scales, microscopes, and binoculars) to perform tests, collect data, and display data
Science of Flight	CA	SCI.7.LSIE.7.a	Scientific progress is made by asking meaningful questions and conducting careful investigations. As a basis for understanding this concept and addressing the content in the other three strands, students should develop their own questions and perform investigations. Students will Select and use appropriate tools and technology (including calculators, computers, balances, spring scales, microscopes, and binoculars) to perform tests, collect data, and display data
Science of Flight	CA	SCI.7.LSIE.7.b	Scientific progress is made by asking meaningful questions and conducting careful investigations. As a basis for understanding this concept and addressing the content in the other three strands, students should develop their own questions and perform investigations. Students will Use a variety of print and electronic resources (including the World Wide Web) to collect information and evidence as part of a research project
Scientific Method(124-144)	CA	SCI.7.LSIE.7.a	Scientific progress is made by asking meaningful questions and conducting careful investigations. As a basis for understanding this concept and addressing the content in the other three strands, students should develop their own questions and perform investigations. Students will Select and use appropriate tools and technology (including calculators, computers, balances, spring scales, microscopes, and binoculars) to perform tests, collect data, and display data
Scientific Method(124-144)	CA	SCI.7.LSIE.7.b	Scientific progress is made by asking meaningful questions and conducting careful investigations. As a basis for understanding this concept and addressing the content in the other three strands, students should develop their own questions and perform investigations. Students will Use a variety of print and electronic resources (including the World Wide Web) to collect information and evidence as part of a research project

Scientific Method(124-144)	CA	SCI.7.LSIE.7.c	Scientific progress is made by asking meaningful questions and conducting careful investigations. As a basis for understanding this concept and addressing the content in the other three strands, students should develop their own questions and perform investigations. Students will Communicate the logical connection among hypotheses, science concepts, tests conducted, data collected, and conclusions drawn from the scientific evidence
Exploring Aeronautics			
1998 Science			
Content Standards			
California Science			
Grade 8			
Activity/Lesson	State	Standards	
Fundamentals of Aeronautics (145-176)	CA	SCI.8.PC.2.a	Students know a force has both direction and magnitude.
Fundamentals of Aeronautics (145-176)	CA	SCI.8.PC.2.b	Students know when an object is subject to two or more forces at once, the result is the cumulative effect of all the forces.
Fundamentals of Aeronautics (145-176)	CA	SCI.8.PC.2.e	Students know that when the forces on an object are unbalanced, the object will change its velocity (that is, it will speed up, slow down, or change direction).
Fundamentals of Aeronautics (145-176)	CA	SCI.8.PC.8.c	Students know the buoyant force on an object in a fluid is an upward force equal to the weight of the fluid the object has displaced.
How an Airplane Flies	CA	SCI.8.PC.2.a	Students know a force has both direction and magnitude.
How an Airplane Flies	CA	SCI.8.PC.2.b	Students know when an object is subject to two or more forces at once, the result is the cumulative effect of all the forces.
How an Airplane Flies	CA	SCI.8.PC.2.e	Students know that when the forces on an object are unbalanced, the object will change its velocity (that is, it will speed up, slow down, or change direction).
How an Airplane Flies	CA	SCI.8.PC.2.f	Students know the greater the mass of an object, the more force is needed to achieve the same rate of change in motion.
The Activity Center	CA	SCI.8.PC.2.a	Students know a force has both direction and magnitude.
The Activity Center	CA	SCI.8.PC.2.e	Students know that when the forces on an object are unbalanced, the object will change its velocity (that is, it will speed up, slow down, or change direction).
Science of Flight	CA	SCI.8.PC.2.b	Students know when an object is subject to two or more forces at once, the result is the cumulative effect of all the forces.

Science of Flight	CA	SCI.8.PC.2.e	Students know that when the forces on an object are unbalanced, the object will change its velocity (that is, it will speed up, slow down, or change direction).
Science of Flight	CA	SCI.8.PC.2.f	Students know the greater the mass of an object, the more force is needed to achieve the same rate of change in motion.
Science of Flight	CA	SCI.8.PCIE.9.a	Plan and conduct a scientific investigation to test a hypothesis.
Integrating with Aeronautics	CA	SCI.8.PCIE.9.d	Recognize the slope of the linear graph as the constant in the relationship $y = kx$ and apply this principle in interpreting graphs constructed from data.
Integrating with Aeronautics	CA	SCI.8.PCIE.9.e	Construct appropriate graphs from data and develop quantitative statements about the relationships between variables.
Integrating with Aeronautics	CA	SCI.8.PCIE.9.g	Distinguish between linear and nonlinear relationships on a graph of data.
Intro to Aeronautics (109-123)	CA	SCI.8.PC.2.a	Students know a force has both direction and magnitude.
Intro to Aeronautics (109-123)	CA	SCI.8.PC.2.b	Students know when an object is subject to two or more forces at once, the result is the cumulative effect of all the forces.
Intro to Aeronautics (109-123)	CA	SCI.8.PC.2.e	Students know that when the forces on an object are unbalanced, the object will change its velocity (that is, it will speed up, slow down, or change direction).
Scientific Method(124-144)	CA	SCI.8.PCIE.9.a	Plan and conduct a scientific investigation to test a hypothesis.
Scientific Method(124-144)	CA	SCI.8.PCIE.9.e	Construct appropriate graphs from data and develop quantitative statements about the relationships between variables.